DOCUMENT RESUME

ED 054 253 UD 011 729

TITLE	Lunch Programs in the Nation's Schools.
INSTITUTION	Economic Research Service (DOA), Washington, D.C.
REPORT NO	AE-R-210
PUB DATE	Jun 71
NOTE	45p.
AVAILABLE FROM	Superintendent of Documents, Govt. Printing Office, Washington, D.C. 20402 (Price not known)
EDRS PRICE	EDRS Price MF-$0.65 HC-$3.29
DESCRIPTORS	Economic Disadvantagement, *Federal Programs, *Financial Support, *Lunch Programs, Nutrition, *Program Effectiveness, School Involvement, Statistical Data, Student Enrollment, *Student Participation

ABSTRACT

This study of lunch services in public and private elementary and secondary schools is one of a group evaluating selected aspects of public food assistance programs. During a survey in March 1968, noontime food services were provided in about 75 percent of the nation's schools, serving about 80 percent of all pupils enrolled. Results of the survey indicate that the school lunch service has become an important adjunct to school operations. A new approach to determine eligibility for lunch service will increase participation and availability in lunch programs. A particular problem exists in persuading pupils to eat lunches where services are now available. (Author/DM)

5

Agricultural Economic Report No. 210

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

ED0 54253

Lunch Programs in the Nation's Schools

UD 011729

U.S. DEPARTMENT OF AGRICULTURE

Economic Research Service

1

ABSTRACT

Noontime food services were provided in about 75 percent of the Nation's 105,000 public and private elementary and secondary schools during a survey in March 1968. Most of these schools with food service participated in the National School Lunch Program (NSLP).

Schools with food service had 41 million pupils enrolled--over 80 percent of the estimated 50.7 million pupils in all schools. Nearly 20 million pupils ate plate lunches daily. The availability of food service will increase in the future, but not as rapidly as in the past. Most of this gain will probably be within the NSLP. Impetus for increased pupil participation and availability of food service will be provided through new eligibility requirements for free lunches in the NSLP and additional funding to implement food services.

Key Words: Lunch service, National School Lunch Program, schools.

For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 20402

2

PREFACE

This study of lunch services in public and private elementary and secondary schools is one of a group evaluating selected aspects of public food assistance programs. Previous studies also dealt with food services offered in the Nation's schools and, in addition, measured the market for foods which they create.

School lunch officials at all levels of government have a continuing need for information on the status of school lunch operations, on factors affecting participation, and on identifying areas where unmet need exists. In addition, firms that process and distribute food and provide other supplies, equipment and services used by the school market require data as a basis for evaluating their current and future food production and marketing efforts.

Many school officials cooperated by making available the data upon which the report is based. Special acknowledgment is made to the Governments Division, U.S. Bureau of the Census, for data collection and initial editing of responses for the study.

Elizabeth White, ERS, Marketing Economics Division, had a leading role in developing study plans. Officials of the Food and Nutrition Service, USDA, gave valuable assistance in planning the study, particularly Samuel C. Vanneman, Assistant Deputy Administrator, and Herbert D. Rorex, Director, Child Nutrition Division.

Related USDA reports include:

Anderson, Kenneth E. School Lunch Programs in Elementary and Secondary Schools of the United States. Mktg. Res. Rpt. 262, 48 pp., Aug. 1958. Available in libraries.

Anderson, Kenneth E. Milk Consumption in the Nation's Schools. Mktg. Res. Rpt. 284, 29 pp., Nov. 1958. Available in libraries.

Anderson, Kenneth E., and Hoofnagle, William S. The Market for Food in Public Schools. Mtkg. Res. Rpt. 377, 58 pp., Jan. 1960. Available in libraries.

Kriesberg, Martin. Trends in the School Market for Food. Mktg. and Transportation Situation, pp. 33-36, Aug. 1964. Available in libraries.

Kriesberg, Martin. Food Service in Private Elementary and Secondary Schools. Mktg. Res. Rpt. 678, 21 pp., Oct. 1964. Available in libraries.

Kriesberg, Martin. Food Service in Public Schools. Mktg. Res. Rpt. 681, 39 pp., Nov. 1964. Available in libraries.

Kriesberg, Martin. The Market for Food in the Nation's Schools. Mktg. Res. Rpt. 702, 54 pp., April 1965.

Freund, William H., and Reese, Robert B. Milk and Milk Products in the Nation's Schools. Mktg. Res. Rpt. 716, 23 pp., June 1965.

Freund, William H. Food Service in the Nation's Schools: A Preliminary Report. ERS-434, 11 pp., Dec. 1969.

CONTENTS

	Page
Summary	iv
Introduction	1
Availability of food service in the Nation's schools	3
Schools as a market for food	5
Food service in public schools	7
The National School Lunch Program	7
Requirements for a school lunch	7
Rate of pupil participation	11
Other plate lunch and a la carte service in public schools	11
Food service operations	13
Food preparation	13
Food service equipment	16
Schools without food service	16
Expanding school food service	16
Food service in private schools	21
Availability of service	21
Rate of pupil participation	21
Private schools without food service	26
Factors affecting pupil participation	26
The needy pupil	29
Trends in school food service	32
Trends in availability in public schools	32
Daily participation trends in public schools	33
Trends in private school food service	33
Future school enrollments and pupil participation	37
Conclusions	37
Appendix I--Additional tables	38
Appendix II--Methodology	41

Washington, D.C. 20250 June 1971

SUMMARY

Over 41 million pupils in the Nation's public and private elementary and secondary schools, or 82 percent, had a lunch service available in March 1968, when schools were surveyed.

Approximately three-fourths of the 89,000 public schools were affiliated with the National School Lunch Program (NSLP) during the survey period. Lunches in these schools were available to almost 35 million pupils--78 percent of total public school enrollment. Another 4,600 public schools, with 3.8 million pupils, had lunch service outside the program available.

About 6,400 of the 16,000 private schools provided lunch service for 2.8 million pupils. Most of these schools were participating in the NSLP.

On a typical day in March 1968, an average of 17.9 million public school pupils ate lunches provided through the NSLP. These pupils accounted for 40 percent of all pupils in U.S. public elementary and secondary schools.

Average daily participation in the NSLP was slightly higher in private schools than in public schools--56 compared with 51 percent. But private schools served only 1.1 million lunches.

Findings indicated that several factors tend to influence daily participation in school lunch programs: prices charged, pupils permitted to leave school premises, and school grade. Lower prices--30 to 35 cents on the average--are associated with higher participation; also, secondary school students may eat at commercial establishments or purchase a la carte items. Participation was higher in elementary schools.

Schools participating in the NSLP must provide free or reduced-price lunches to pupils who cannot afford to pay full price. About 2.1 million public and 132,000 private school pupils received such lunches at the time of the survey. Following passage of Public Law 91-248 on May 14, 1970, national standards based on family income criteria are being used in determining eligibility for free or reduced-price lunches.

Schools are one of the largest segments of the market for food eaten away from home. In 1968, the total wholesale value of foods used by schools totaled $1.4 billion. Of this amount, approximately 80 percent was acquired through local channels, and 20 percent was contributed by the Federal Government.

The proportion of public schools with food service increased from 57 percent in 1957 to 78 percent in 1968. This growth in availability means more public school pupils now have access to a noontime food service than ever before. Eighty-six percent of all public school pupils have lunch services available, or 6 percent more than in 1957. Virtually all the growth has occurred within the NSLP.

However, many pupils still do not consume plate lunches daily. The new criteria for determining eligibility for free or reduced-price lunches and the special nonfood assistance for implementing a food service will strengthen the national program through increased participation and availability of lunch programs. However, other means may need to be explored to reach many pupils not affected by the legislation. Persuading pupils to eat lunches where services are now provided is a continuing problem.

LUNCH PROGRAMS IN THE NATION'S SCHOOLS

by

William H. Freund
Agricultural Economist
Marketing Economics Division

INTRODUCTION

Noontime food service is now generally accepted as an essential part of school operations. Approximately three-fourths of the Nation's public and private elementary and secondary schools provide food service. Most of these participate in the National School Lunch Program (NSLP).

Federal assistance for lunch programs was first given in the early 1930's. In 1935, legislation was passed which enabled USDA to purchase commodities for distribution to schools serving lunches on a nonprofit basis.

The program became permanent with the passage of the National School Lunch Act of 1946. This act authorized Federal assistance for school lunch programs in the form of State grant-in-aid programs that provide both cash and food assistance. The basic purpose of the program is to "safeguard the health and well-being of the Nation's children, and to encourage the domestic consumption of nutritious agricultural commodities and other food." USDA carries out the provisions of the act with the cooperation of State departments of education. 1/

Passage of the Child Nutrition Act of 1966 (P.L. 89-642) strengthened and expanded food service programs. The major consequence of this act was the authorization to initiate school breakfast programs and provide nonfood assistance to schools without food service. As of February 1971, over 6,000 schools, primarily located in low-income areas, served about 0.7 million breakfasts daily. Under the nonfood assistance authorization, USDA assists States through grants-in-aid and other means to supply schools in low-income areas with food service equipment to establish, maintain, and expand school food service programs. Under the provisions of this act, at least one-fourth of the cost of any equipment purchased or leased must be borne by the State or local community.

1/ Authority for the distribution of agricultural commodities to the National School Lunch Program derives from (1) Section 6 of the National School Lunch Act, as amended; (2) Section 32 (surplus removal) of the Agricultural Adjustment Act of August 24, 1935, as amended; and (3) Section 416 (price support) of the Agriculture Act of 1949, as amended. Section 6 authorizes USDA to make direct commodity purchases to be distributed among States and schools participating in the NSLP. Commodities acquired under Section 32 may be donated to nonprofit school lunch programs and to needy groups within this country. If commodities acquired by the Commodity Credit Corporation through Section 416 cannot be disposed of through normal domestic channels without impairment of the price-support program or sold abroad at competitive world prices, they may be donated to nonprofit school lunch programs and other eligible recipients.

Public and nonprofit private elementary and secondary schools may participate in the NSLP and apply for Federal assistance. Participating schools must agree to serve nutritious meals on a nonprofit basis and make these lunches available to all children without discrimination.

At the time of the survey, another criterion for participation in the national program was that schools had to agree to provide free or reduced-price lunches to children determined by local school authorities to be unable to pay the full price. The method of determining eligibility was changed with the passage of Public Law 91-248 on May 14, 1970. Under the new procedure, criteria for need include, as a minimum, the level of family income, including welfare grants, household size, and the number of children within the family attending schools and service institutions. The poverty guidelines to be used for any fiscal year are to be prescribed by the Secretary of Agriculture on July 1 of that year. Another provision of the law affecting needy pupils is the requirement that reduced-price lunches cannot exceed 20 cents per meal. These guidelines are being implemented in the 1970-71 school year.

The growth in the availability of noontime food services has been phenomenal, particularly within the framework of the NSLP. Schools in every State participate in the program, which also covers Puerto Rico, the Virgin Islands, Guam, and American Samoa. This reflects the views of educators and parents that a school lunch is a necessary adjunct to learning.

This study was made to update information on the school food programs in the 50 States, measure the extent of pupil participation, and analyze factors associated with school and pupil participation. Findings permit comparisons with data from surveys conducted in 1957 and 1962 for analyses of trends in food service by type of lunch program offered. 2/

Most of the results are based on a representative national sample of 3,673 of the approximately 105,000 public and private elementary and secondary schools which were operating during March 1968 in the 50 States (fig. 1). These schools received a questionnaire dealing primarily with school lunch services. The survey methodology is described in Appendix II.

The data in this report differ from that published by the Program Reporting Staff of the Food and Nutrition Service. Their findings are based only on reports received from schools participating in the NSLP. Food and Nutrition Service statistics also include schools operating in special-status territories. Differences between data in this report and other statistics may occur due to sampling variability and the base period used.

2/ Two earlier reports by Martin Kriesberg describe the results of a survey made in 1962: Food Service in Public Schools, U.S. Dept. Agr. Mktg. Res. Rpt. 681, October 1964; Food Service in Private Elementary and Secondary Schools, U.S. Dept. Agr. Mktg. Res. Rpt. 678, October 1964.

Figure 1

AVAILABILITY OF FOOD SERVICE IN THE NATION'S SCHOOLS

Projected sample survey data indicate lunch service was available in over 76,000 of the 105,150 public and private elementary and secondary U.S. schools in March 1968 (table 1).

The proportion of schools with a lunch service varied considerably by region, ranging from 61 percent of the schools in the Northeast to 95 percent in the Southeast. The proportion of schools offering lunch service in places with fewer than 10,000 persons was about 10 percent higher than in larger population centers, where 66 to 68 percent of all schools provided such service. Also, lunch service was more likely to be offered in schools with larger enrollments. At least 80 percent of the schools with 500 or more pupils had a lunch program, compared with 55 percent of the schools with fewer than 250 pupils. On the basis of grades taught, a much lower proportion of elementary schools provided a lunch service than junior or senior high schools or other grade combinations.

Over 70,000 of the estimated 76,000 schools with a lunch service participated in the NSLP. However, the proportion of program participants was somewhat lower in schools characterized by junior or senior high school grades, larger enrollments, and location in major population centers. This lack of participation is discussed in a later section.

Table 1.--Number of public and private schools by type of lunch service offered, region, and school characteristics, March 1968 1/

Item	National School Lunch Program		Other lunch programs		Total schools with lunch service		No lunch service		Total schools
	Schools	Percentage of all schools	Schools	Percentage of all schools	Schools	Percentage of all schools	Schools	Percentage of all schools	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number
United States	70,065	67	6,344	6	76,409	73	28,741	27	105,150
Regions:									
Northeast	13,750	56	1,188	5	14,938	61	9,650	39	24,584
Southeast	16,949	90	929	5	17,878	95	1,005	5	18,882
Midwest	19,807	60	1,558	5	21,365	65	11,859	36	33,224
Southwest	11,922	82	1,111	8	13,033	90	1,467	10	14,500
West	7,641	55	1,558	11	9,199	66	4,760	34	13,958
Schools located in places with population of:									
Less than 10,000	41,423	75	1,367	2	42,790	77	12,281	22	55,070
10,000-49,999	13,806	60	1,890	8	15,696	68	7,217	32	22,914
50,000-299,999	8,222	56	1,394	10	9,616	66	5,058	34	14,675
300,000 and over	6,613	53	1,693	14	8,306	67	4,185	34	12,492
Size of school (pupil enrollment):									
Under 250	15,053	52	975	3	16,028	55	12,619	44	28,647
250-499	22,834	67	1,783	5	24,617	72	9,614	28	34,230
500-749	15,913	75	979	5	16,892	80	4,341	20	21,232
750 and over	16,267	77	2,607	12	18,874	89	2,168	10	21,040
Grades taught:									
Elementary (grades 1-8)	46,515	61	2,963	4	49,478	65	26,232	35	75,709
Junior and senior high (grades 7-9 or 9-12)	10,429	74	2,637	19	13,066	93	1,093	8	14,159
Other combinations 2/	13,121	86	744	5	13,865	91	1,417	9	15,281

1/ Due to rounding and sampling variability, detail in this and other tables may not add to totals.
2/ This category includes any schools teaching grade combinations other than those listed, i.e., grades 1-12.

Since larger schools tend to have some type of lunch service, lunches were available to a higher proportion of students than the ratio of schools with food service might suggest. Thus, the 73 percent of the schools that provided a lunch service account for 82 percent of the 50.7 million pupils enrolled during 1968 (table 2). At least 9 out of 10 pupils in the Southeast or Southwest, in large schools (750 pupils or more), in junior and senior high schools, and in other grade combination schools had some type of lunch service available.

SCHOOLS AS A MARKET FOR FOOD

The market for food in elementary and secondary schools represents a major outlet for the Nation's farm products. As a segment of the eating-away-from-home market, its size is exceeded only by separate eating places (public restaurants, drive-ins, cafeterias, etc.) and the U.S. military service. The wholesale value of foods purchased or received as donations by schools was estimated at $1.4 billion for the July 1967-June 1968 school year--up $0.4 billion since the 1962-63 school year. The major market for food is accounted for by schools participating in the NSLP, with the largest markets located in the Northeast, Southeast, and Midwest.

Most foods used by schools for lunch services were purchased locally through regular commercial channels, primarily at wholesale. The funds used for these purchases came from cash receipts of sales to pupils and others, cash funds received from USDA, and State and local contributions. In fiscal year 1968, a little more than $1.1 billion worth of food, approximately 80 percent of the total food bill, was purchased through commercial channels. The remaining 20 percent was acquired from USDA.

USDA is authorized to distribute surplus commodities and other foods to schools providing food service on a nonprofit basis. The value of foods donated under this authority in fiscal 1968 was $276 million. 3/ During fiscal 1968, approximately 72,500 public and private schools with lunch programs received some donated commodities. Virtually all schools in the NSLP and about 62 percent of the other public and private schools serving food received some Federal foods.

Among the foods being donated by USDA at the time of the study under Section 6 of the National School Lunch Act were canned and frozen beef, canned and frozen chicken, canned pork, canned apple sauce, grapefruit, peaches, pineapple, plums, canned string beans, peas, sweetpotatoes, tomatoes, and dehydrated sweetpotatoes. Commodities given by USDA under its surplus-removal (Section 32) and price-support (Section 416) programs were canned and frozen beef, frozen turkey and fowl, canned chopped meat, dried eggs, butter, cheese, nonfat dry milk, cornmeal, grits, lard, margarine, peanut butter, grape juice, orange juice, canned pears, plums, raisins, white potatoes, dried beans and peas, rice, bulgur, flour and rolled wheat, rolled oats, and honey.

Public schools received most of the donated commodities because of their large number, large pupil enrollment, and large proportion with food service.

3/ This includes $56 million under Section 6 of the National School Lunch Act, as amended; $100 million under Section 32 of Public Law 320, 1935, and $120 million under Section 416 of the Agricultural Act of 1949, as amended.

Table 2.--Pupil enrollment in public and private schools by type of lunch service offered, region, and school characteristics, March 1968 1/

Item	National School Lunch Program		Other lunch programs		Total pupils with lunch service		No lunch service		Total pupils
	Pupils	Percentage of all pupils	Pupils	Percentage of all pupils	Pupils	Percentage of all pupils	Pupils	Percentage of all pupils	
	Thousands	Percent	Thousands	Percent	Thousands	Percent	Thousands	Percent	Thousands
United States	36,794	73	4,630	9	41,424	82	9,319	18	50,743
Regions:									
Northeast	8,388	65	802	6	9,190	71	3,800	29	12,990
Southeast	8,510	90	664	7	9,174	97	223	2	9,397
Midwest	10,584	69	1,073	7	11,657	76	3,619	24	15,276
Southwest	5,488	84	617	9	6,105	93	444	7	6,549
West	3,826	59	1,473	22	5,299	81	1,233	19	6,532
Schools located in places with population of:									
Less than 10,000	17,359	85	625	3	17,984	88	2,455	12	20,439
10,000-49,999	8,512	66	1,412	11	9,924	77	2,976	23	12,900
50,000-299,999	5,465	62	1,355	15	6,820	77	2,039	23	8,859
300,000 and over	5,459	64	1,238	14	6,697	78	1,848	22	8,545
Size of school (pupil enrollment):									
Under 250	2,006	62	117	4	2,123	66	1,131	35	3,254
250-499	8,022	67	650	6	8,672	73	3,277	27	11,949
500-749	8,777	75	566	5	9,343	80	2,409	20	11,752
750 and over	17,989	76	3,297	14	21,286	90	2,501	10	23,787
Grades taught:									
Elementary	19,648	67	1,486	5	21,134	72	8,314	28	29,448
Junior and senior high	8,626	73	2,639	22	11,265	95	489	4	11,754
Other combinations	8,520	89	504	5	9,024	94	515	5	9,539

1/ Due to rounding, detail may not add to totals.

FOOD SERVICE IN PUBLIC SCHOOLS

Food service is made available to public school children in a variety of ways. Some schools offer a plate lunch and milk; others may provide a combination of plate lunch, milk, and a la carte service; some offer a plate lunch but no supplemental milk; and a few schools provide only a la carte service. In addition, vending machines and snack bars are also provided by some schools.

Lunches were available in approximately 70,000 of the 89,184 public elementary and secondary schools during March 1968 (table 3). Of the remaining 19,000 schools--those without a lunch service--about two-thirds provided milk. In terms of pupil enrollment, an estimated 38.7 million pupils had access to a lunch service, while only about 1.5 million pupils had neither lunch nor milk available.

The proportion of public schools with a lunch service varied considerably by region, ranging from 68 percent in the Northeast to 98 percent in the Southeast (table 4). Less variation was apparent when schools were classified by local population. When computed by size of school and by grade, it appears that lunch service is more likely to be offered in larger schools and schools teaching junior and senior high grades or other grade combinations.

Because larger public schools often had some type of lunch service, food service was available to more students than the ratio of schools with food service might suggest. Eighty-six percent of the pupils in public elementary and secondary schools had a food service available. Of the remaining 14 percent, most pupils had a milk service. When classified by region and various school characteristics, findings are similar to those noted in the proportion of schools with food service. For example, proportionately more pupils in junior and senior high schools, in larger schools, and in the Southeast region had access to a lunch service.

The National School Lunch Program

Survey results indicate over 65,000 of the estimated 69,993 public schools with lunch service participated in the NSLP. 4/ These schools represent 73 percent of the public schools (table 5). The predominance of the national program extends over all regions and school characteristics.

In terms of pupil enrollment, the importance of the program is also apparent. Seventy-eight percent of the public school total, nearly 35 million pupils, were enrolled in participating schools at the time of the survey. While ratios of pupils covered by the program vary by region and other school characteristics, over 60 percent of pupils in all regions of the Nation had access to the program.

Most schools with other types of lunch service were located in the Midwest and West. Such schools were rather evenly distributed when classified by location (population). However, in terms of school size, nearly half were schools with 750 or more pupils enrolled. Enrollment data indicated approximately 8 percent of the Nation's children had access to these other lunch programs.

Requirements for a School Lunch

The NSLP in March 1968 required schools preparing plate lunches to include, as a minimum, the following for Type A lunches:

4/ About 4,700 private schools also participated in the NSLP. These schools had an enrollment of about 1.9 million pupils, or 33 percent of total enrollment in private schools.

Table 3.--Number of public schools and pupils having specified kinds of food services available, by region and school characteristics, March 1968

Item	Lunch service 1/		Milk service only		No lunch or milk service		Total	
	Schools	Pupils	Schools	Pupils	Schools	Pupils	Schools	Pupils
	Number	Thousands	Number	Thousands	Number	Thousands	Number	Thousands
United States	69,993	38,666	12,509	4,774	6,683	1,493	89,184	44,932
Regions:								
Northeast	13,306	8,374	4,820	1,879	1,331	516	19,457	10,770
Southeast	17,270	8,946	207	48	118	14	17,594	9,008
Midwest	18,570	10,447	5,086	2,054	3,371	560	27,028	13,061
Southwest	12,183	5,805	503	247	503	92	13,188	5,144
West	8,664	5,091	1,893	545	1,360	310	11,917	5,948
Schools located in places with population of:								
Less than 10,000	40,749	17,256	4,435	1,232	4,613	599	49,797	19,086
10,000-49,999	13,898	9,058	3,903	1,546	1,006	436	18,807	11,039
50,000-299,999	8,279	6,186	2,750	1,186	680	278	11,710	7,650
300,000 and over	7,067	6,167	1,419	810	384	179	8,871	7,156
Size of schools (pupil enrollment):								
Under 250	13,987	1,814	4,110	453	4,110	166	22,208	2,432
250-499	22,089	7,778	4,791	1,610	1,568	568	28,447	9,956
500-749	15,969	8,788	2,543	1,368	680	374	19,191	10,531
750 or more	17,950	20,285	1,065	1,342	325	386	19,339	22,013
Grades taught:								
Elementary	45,007	19,530	11,770	4,445	5,885	1,181	62,660	25,156
Junior and senior high	12,094	10,652	325	164	355	202	12,774	11,017
Other combinations	12,893	8,483	414	165	444	111	13,750	8,759

1/ These schools may or may not offer a supplemental milk service.

Table 4.--Percentages of public schools and pupils having specified kinds of food services available, by region and school characteristics, March 1968

Item	Lunch service 1/		Milk service only		No lunch or milk service		Total	
	Schools	Pupils	Schools	Pupils	Schools	Pupils	Schools	Pupils
	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
United States	78	86	14	11	8	3	100	100
Regions:								
Northeast	68	78	25	17	7	5	100	100
Southeast	98	99	1	1	1	2/	100	100
Midwest	69	80	19	16	12	4	100	100
Southwest	92	94	4	4	4	1	100	100
West	73	86	16	9	11	5	100	100
Schools located in places with population of:								
Less than 10,000	82	90	9	6	9	3	100	100
10,000-49,999	74	82	21	14	5	4	100	100
50,000-299,999	71	81	23	16	6	4	100	100
300,000 and over	80	86	16	11	4	3	100	100
Size of schools (pupil enrollment):								
Under 250	63	75	19	19	19	7	100	100
250-499	78	78	17	16	5	6	100	100
500-749	83	83	13	13	4	4	100	100
750 or more	93	92	6	6	2	2	100	100
Grades taught:								
Elementary	72	78	19	18	9	5	100	100
Junior and senior high	95	97	3	1	3	2	100	100
Other combinations	94	97	3	2	3	1	100	100

1/ These schools may or may not offer a supplemental milk service.
2/ Less than 0.5 percent.

Table 5.--Number of public schools and pupils by type of lunch service available, region, and school characteristics, March 1968

Item	National School Lunch Program				Other lunch service			
	Schools	Percentage of all public schools	Pupils	Percentage of all pupils enrolled	Schools	Percentage of all public schools	Pupils	Percentage of all pupils enrolled
	Number	Percent	Thousands	Percent	Number	Percent	Thousands	Percent
United States	65,350	73	34,891	78	4,643	5	3,774	8
Regions:								
Northeast	12,774	66	7,923	74	532	3	453	4
Southeast	16,560	94	8,368	93	710	4	578	6
Midwest	17,328	64	9,615	74	1,242	5	853	6
Southwest	11,266	85	5,249	85	917	7	556	9
West	7,422	62	3,738	63	1,242	10	1,354	23
Schools located in places with population of:								
Less than 10,000	39,625	80	16,742	88	1,124	2	514	3
10,000-49,999	12,567	67	7,952	72	1,331	7	1,105	10
50,000-299,999	7,274	62	5,053	66	1,005	9	1,133	15
300,000 and over	5,884	66	5,145	72	1,183	13	1,021	14
Size of schools (pupil enrollment):								
Under 250	13,425	60	1,750	72	562	3	64	3
250-499	21,084	74	7,414	74	1,005	4	364	4
500-749	15,111	79	8,294	79	858	4	495	5
750 or more	15,732	81	17,434	79	2,218	11	2,851	13
Grades taught:								
Elementary	42,700	68	18,317	73	2,307	4	1,213	5
Junior and senior high	10,113	79	8,433	77	1,981	16	2,218	20
Other combinations	12,538	91	8,141	93	355	3	342	4

(1) One-half pint of fluid whole milk as a beverage;
(2) Two ounces (edible portion as served) of lean meat, poultry, or fish; or 2 ounces of cheese; or one egg; or one-half cup of cooked dry beans or peas; or 4 tablespoons of peanut butter; or an equivalent quantity of any combination of the above listed foods. To be counted in meeting this requirement, these foods must be served in a main dish and with one other menu item;
(3) A three-fourths cup serving consisting of two or more vegetables or fruits or both. Full-strength vegetable or fruit juice may be counted to meet not more than one-fourth cup of this requirement;
(4) One slice of whole-grain or enriched bread; or a serving of cornbread, biscuits, rolls, muffins, etc., made of whole-grain or enriched meal or flour; and
(5) Two teaspoons of butter or fortified margarine. (This requirement has since been reduced to one teaspoon.)

The average cost for preparing a Type A lunch was approximately 50 cents per meal.

Rate of Pupil Participation

At the time of the survey, approximately 17.9 million pupils in public schools ate plate lunches under the NSLP on a normal day (table 6). About 10 million of these pupils were in elementary schools. An additional 736,000 pupils consumed plate lunches offered by schools with other lunch service.

Approximately 51 percent of the pupils in the public NSLP schools were eating a plate lunch daily. However, actual daily participation probably exceeded by roughly 2 to 5 percent the figures shown in table 6, since average daily attendance usually runs 5 to 10 percent below enrollment.

The proportion of pupils who ate the school plate lunch daily to pupils enrolled varied by region and school characteristics. Daily pupil participation as a percentage of pupils enrolled in schools with the NSLP was highest in the Southeast and in small schools. When classified by school location, 58 percent of the pupils in schools in places of under 10,000 population consumed the plate lunch daily.

Data indicate participating students in the NSLP represented 40 percent of the national enrollment in public schools. Regionally, however, the national program reaches much higher proportions of pupils in the Southeast and a lower proportion of pupils in the West. Fifty-one percent of pupils in schools in places under 10,000 population participated daily--over twice the percentage for major population centers. A similar difference was noted in the grades classification, where the participation ratio was much higher in elementary grades than in junior and senior high schools.

Pupil participation in the NSLP was significantly higher than participation at schools with other plate lunch programs, 51 compared with 35 percent. When classified by region and size of school, participation in other plate lunch programs generally followed the same patterns as the national program. Only about 2 percent of the Nation's pupils participated in lunch programs in such schools.

Other Plate Lunch and A La Carte Service in Public Schools

The NSLP is the foundation for in-school food programs. However, approximately 4,500 public schools not under the program operated some type of lunch service in March 1968. 5/ About 64 percent of these schools provided plate lunches with or

---

5/ In addition, 1,700 private schools with 856,000 pupils provided a lunch service outside the NSLP.

Table 6.--Average daily participation (number of lunches served daily) in public school lunch programs and ratio of daily participation to pupils enrolled and total enrollment, by region and school characteristics, March 1968

Item	Schools with National School Lunch Program			Schools with other plate lunch programs		
	Average daily participation	Daily participation as percentage of pupils enrolled in NSLP	Daily participation as percentage of total public school enrollment	Average daily participation	Daily participation as percentage of pupils enrolled in non-NSLP programs	Daily participation as percentage of total public school enrollment
	Thousands	Percent	Percent	Thousands	Percent	Percent
United States	17,884	51	40	736	35	2
Regions:						
Northeast	3,251	41	30	92	26	1
Southeast	5,815	69	65	52	51	1
Midwest	4,420	46	34	137	28	1
Southwest	2,859	54	47	203	54	3
West	1,539	41	26	252	33	4
Schools located in places with population of:						
Less than 10,000	9,753	58	51	92	35	1
10,000-49,999	3,860	49	35	177	25	2
50,000-299,999	2,543	50	33	208	41	3
300,000 and over	1,728	34	24	259	43	4
Size of schools (pupil enrollment):						
Under 250	1,343	77	55	28	58	1
250-499	4,053	55	41	69	26	1
500-749	4,749	57	45	161	44	2
750 or more	7,739	44	35	478	34	2
Grades taught:						
Elementary	10,058	55	40	327	37	1
Junior and senior high	3,207	38	29	316	32	3
Other combinations	4,619	57	53	93	42	1

without a la carte service to their 2.1 million students. The remainder, with about 1.7 million pupils, had only a la carte service available (table 7).

One significant characteristic of schools with a plate lunch service not under the NSLP is that over 1,800 of the estimated 2,957 consisted of elementary grades. To support a lunch service without the assistance available under the national program requires a relatively larger school in terms of enrollment. Thus, another characteristic of these schools is that over 50 percent had at least 500 pupils enrolled.

Schools providing only a la carte service were primarily junior and senior high schools and had at least 750 pupils enrolled. Demand for such service may be greatest in schools of this type. Very few schools in the Northeast or schools with enrollments of under 250 pupils supported a la carte service only.

Food Service Operations

Food Preparation

Growth in the Nation's school enrollment and participation in noontime food services has placed additional burdens on food preparation operations in individual schools. To cope with the increased demand, many schools were utilizing main-dish convenience foods. 6/ Forty-seven percent of the public schools in the NSLP and 52 percent of other schools with a food service indicated using convenience foods during the survey month (table 8).

Convenience foods were more likely to be used by NSLP schools in the Northeast and larger schools. Schools using convenience foods indicated it was unnecessary to acquire special equipment or facilities. Still, 45 percent felt the use of convenience foods did not reduce labor requirements. This indicates that, with the increasing number of lunches being served daily, convenience foods may have had to be utilized not for the potential labor savings, but to keep food preparation time limits at a minimum. Then, too, some schools were able to provide items attractive to children within existing limited labor resources.

The most commonly used convenience foods reported were frozen or canned ravioli, frozen preportioned pizzaburgers, charburgers, beefburgers, and frozen fishburgers or fish patties. Somewhat less common than the above, but still used by a significant proportion of the respondents, were frozen or canned meat balls with sauce and frozen or canned sloppy joe (barbecue sauce with meat).

An important part of lunch preparation in schools is baking bread, rolls, buns (hamburger) and other bread products. Most schools both in and out of the NSLP did all or part of their baking within the school (table 9). However, this varied somewhat by type of product. For example, 20 percent of the schools in the program and 32 percent of the other schools with food service reported rolls were not baked in school. Comparable figures for bread were 14 and 20 percent.

Two options for acquiring bread products were available to schools that did not bake a particular product at the school. They could either purchase the product locally at wholesale or retail or by competitive contract. While the data are not reported here, it appeared that when none of the baking is done on school premises, competitive bidding or contracting was used more often than local purchasing. In contrast, schools baking part of the product on the premises purchased the additional bakery goods locally more often than contracting.

6/ In this study, convenience foods were defined as main-dish foods which are partly or entirely prepared by a food manufacturer, and which have a home-prepared counterpart.

Table 7.--Public schools and pupils not in the National School Lunch Program having plate lunches and a la carte service, by region and school characteristics, March 1968

Item	Plate lunch service				A la carte service only			
	Schools	Schools as percentage of all schools	Pupils	Pupils as percentage of total enroll.	Schools	Schools as percentage of all schools	Pupils	Pupils as percentage of total enroll.
	Number	Percent	Thousands	Percent	Number	Percent	Thousands	Percent
United States	2,957	3	2,092	5	1,686	2	1,682	4
Region:								
Northeast	444	2	357	3	89	1/	95	1
Southeast	236	1	101	1	473	3	477	5
Midwest	828	3	485	4	414	2	348	3
Southwest	650	5	379	6	266	2	177	3
West	799	7	770	13	444	4	583	10
Schools located in places with population of:								
Less than 10,000	828	2	266	1	296	1	249	1
10,000-49,999	917	5	708	6	414	2	397	4
50,000-299,999	414	4	512	7	591	5	622	8
300,000 and over	799	9	607	8	384	4	415	6
Size of school (pupil enrollment):								
Under 250	444	2	48	2	118	1	16	1
250-499	740	3	267	3	266	1	96	1
500-749	651	3	369	4	207	1	125	1
750 or more	1,124	6	1,408	6	1,094	6	1,444	7
Grades taught:								
Elementary	1,803	3	879	4	503	1	334	1
Junior and senior high	917	7	993	9	1,065	8	1,226	11
Other combinations	236	2	220	3	118	1	122	1

1/ Less than 0.5 percent.

Table 8.--Proportion of public schools utilizing convenience foods and the effects on lunch preparations, by type of lunch program, region, and school characteristics, March 1968

Item	Proportion of schools in the NSLP indicating--		Proportion of schools with other lunch programs indicating--	
	Use of convenience foods	Man-hours not reduced 1/	Use of convenience foods	Man-hours not reduced 1/
	Percent	Percent	Percent	Percent
United States	47	45	52	53
Regions				
Northeast	62	53	56	43
Southeast	47	42	54	31
Midwest	47	43	36	46
Southwest	38	39	84	88
West	36	45	43	29
Schools located in places with population of:				
Less than 10,000	41	38	50	31
10,000-49,999	56	49	27	36
50,000-299,999	56	60	56	35
300,000 and over	59	46	80	81
Size of school (pupil enrollment):				
Under 250	33	37	16	50
250-499	35	43	50	65
500-749	70	46	72	44
750 and over	53	48	55	53
Grades taught:				
Elementary	46	44	50	66
Junior and senior high	52	47	57	40
Other combinations	45	47	42	60

1/ As a percentage of schools using convenience foods.

However, it appeared that local purchasing of bread products was more costly than competitive bidding. For example, the price paid by schools in the NSLP for a 1-pound loaf of bread was approximately 3 cents cheaper when bought by contract (appendix table 26). This was also true for 1½- and 2-pound loaves of bread. It appears that some savings could be realized if schools purchasing bread would do so on contract and by purchasing larger units than 1-pound loaves.

Table 9.--Distribution of public schools with food service, by extent of baking, type of bread product, and lunch program, March 1968 1/

Type of lunch program and extent of baking	Type of bread product--			
	Bread	Rolls	Buns	Other
	Percent	Percent	Percent	Percent
Schools with the NSLP:				
All baking in school	24	44	24	53
Part of baking in school	62	36	62	30
No baking in school	14	20	14	17
Total	100	100	100	100
Schools with other lunch program:				
All baking in school	17	29	15	30
Part of baking in school	63	39	61	48
No baking in school	20	32	24	22
Total	100	100	100	100

1/ For reporting schools only. For example, schools not serving rolls were not included in the tabulations.

Food Service Equipment

In the survey, several questions were asked concerning the use of disposable trays, plates, or eating utensils and mechanical dishwashers in school food service operations.

Results indicate disposables were not in major use among NSLP public schools during the survey period. Schools that did report disposables were primarily in the Northeast, in places of 300,000 or over population, and junior or senior high schools (table 10). Disposable eating utensils and plates were more commonly used than disposable trays.

Proportionately more nonprogram schools utilized disposables, particularly in places of 10,000 to 300,000 in population and in the Northeast and West. As was the case with schools in the program, disposable plates and eating utensils were more commonly used than disposable trays.

A large proportion of public schools used mechanical dishwashers both in and out of the NSLP. Generally, over 60 percent reported having a dishwasher. The notable exception was in schools where pupil enrollment was under 250, where the need for such equipment may not have been as great as in larger schools.

Schools Without Food Service

The number of public schools without a plate lunch or a la carte food service declined during 1957-68. In March 1968, approximately 19,000 public schools, with 6.3 million pupils, reported lunch services were not available (table 11). Most of

Table 10.--Public schools utilizing specified types of food service equipment and supplies, by type of lunch service offered, region, and school characteristics, March 1968

Item	Schools in the NSLP		Schools with other lunch service	
	Percentage using disposables	Percentage equipped with mechanical dishwasher	Percentage using disposables	Percentage equipped with mechanical dishwasher
	Percent	Percent	Percent	Percent
United States	5	72	13	82
Regions:				
Northeast	10	82	21	77
Southeast	3	66	8	84
Midwest	4	72	3	84
Southwest	3	66	--	86
West	6	32	32	78
Schools located in places with population of:				
Less than 10,000	3	61	9	60
10,000-49,999	6	83	15	89
50,000-299,999	9	89	21	94
300,000 and over	13	88	8	93
Size of school (pupil enrollment):				
Under 250	4	28	6	25
250-499	3	68	5	78
500-749	5	86	10	94
750 and over	9	92	19	92
Grades taught:				
Elementary	4	69	5	74
Junior and senior high	10	89	23	94
Other combinations	4	69	8	75

Table 11.--Plans for lunch service in public schools without it, by region and school characteristics, March 1968

Item	Schools without lunch service		Schools with plans for lunch service			Schools with no plans for lunch service		
				Pupils			Pupils	
	Schools	Pupils	Schools	Number	As percentage of pupils without lunch ser.	Schools	Number	As percentage of all public school pupils
	Number	Thousands	Number	Thousands	Percent	Number	Thousands	Percent
United States	19,191	6,267	1,244	635	10	17,949	5,630	12
Region:								
Northeast	6,151	2,395	208	235	10	5,944	2,160	20
Southeast	325	62	30	11	18	296	52	1
Midwest	8,457	2,614	710	316	12	7,748	2,297	18
Southwest	1,005	339	89	25	7	916	314	5
West	3,253	857	207	50	6	3,045	807	14
Schools located in places with population of:								
Less than 10,000	9,049	1,831	563	245	13	8,487	1,586	8
10,000-49,999	4,909	1,982	326	132	7	4,583	1,850	17
50,000-299,999	3,430	1,464	326	247	17	3,105	1,218	16
300,000 and over	1,804	989	30	13	1	1,774	976	14
Size of school (pupil enrollment):								
Under 250	8,221	618	356	48	8	7,866	570	23
250-499	6,358	2,178	650	219	10	5,707	1,959	20
500-749	3,223	1,742	118	61	4	3,104	1,681	16
750 or more	1,390	1,728	118	308	18	1,272	1,420	6
Grades taught:								
Elementary	17,654	5,626	1,064	518	9	16,589	5,108	20
Junior or senior high	680	365	119	60	16	561	305	3
Other combinations	858	275	59	58	21	799	218	2

these schools consisted of elementary grades, were small in terms of enrollment, and were located in less densely populated areas of the country. Over 14,000 of these schools were located in the Northeast and Midwest regions of the Nation. Schools in these two regions also accounted for approximately 5 million of the pupils in schools without food service.

Schools without food service were asked about plans for providing such a service within 18 months from the time of the study, that is, by September 1970. Approximately 1,200 public schools, with 635,000 pupils enrolled, had such plans. Most of these schools reflected the characteristics of the other schools without food service. That is, they were mainly in the Midwest or Northeast, in smaller population centers of the country, and were nearly all elementary schools. If trends continue, most of these schools will join the NSLP.

The number of schools without a lunch program as a ratio of all public schools declined from 43 to 22 percent in 1957-68 (table 12). Most of this decline occurred during 1957-62. Still further progress was made during 1962-68, although the rate of change had slowed. For example, from 1962 to 1968, the 6-year decline in the proportion of schools without food service ranged from 34 to 32 percent in the Northeast to 13 and 14 percent in the Southeast and Midwest, respectively. Very little decline between 1962-68 was noted in larger schools (over 250 enrollment) and schools consisting of a combination of grades.

Since public schools without a food service were mostly small, the proportion of pupils without food service is smaller than the ratio of such schools might suggest. Consequently, percentage changes in the number of pupils without lunch service will be less than indicated by changes in the school ratios. Although the net decline of schools without food service was 21 percent in 1957-68, the comparable figure for pupil enrollment was 6 percent. However, as in the case of the school ratios, a considerable amount of variation was noted, particularly in regional and size-of-school classifications. For example, a decline of 10 percent or more of the pupils without access to a lunch program was noted in the Midwest and in small schools (enrollment under 250) since 1957. In absolute terms, however, the Southeast and Southwest have the smallest ratios of pupils without access to a lunch program; 2 and 6 percent, respectively. Small proportions were also noted in junior and senior high schools and in other grade combinations.

Expanding School Food Service

The characteristics of public schools without food service--that is, small or elementary schools--give some indication of the problem that must be faced if the NSLP is to be expanded. These characteristics are also interrelated. For example, smaller schools are generally elementary grades and these classifications contain the greatest proportion of schools and pupils without food service. The number of potential student participants in these schools may be too low to support a lunch program. Several factors could contribute to this. Many elementary schools are probably located within walking distance of home and pupils may go home for lunch. Also, many of these schools offer low-price milk service. Many children attending these schools bring lunches from home and purchase half-pints of milk.

If past trends continue, some of these smaller schools may be merged in the near future into larger schools with eating facilities, so expenditures for installing a food service probably would be unjustified.

Table 12.--Percentage of public schools and pupils without lunch service, by region and school characteristics, March 1957, March 1962, and March 1968

Item	Schools without lunch service 1/			Pupils enrolled in schools without lunch service 2/		
	1957	1962	1968	1957	1962	1968
	Percent	Percent	Percent	Percent	Percent	Percent
United States	43	32	22	20	16	14
Region:						
Northeast	46	34	32	29	20	22
Southeast	24	15	2	7	5	1
Midwest	60	45	31	30	25	20
Southwest	28	19	8	11	9	6
West	35	31	27	14	12	14
Size of school (pupil enrollment):						
Under 250	61	51	37	38	36	25
250 - 499	25	23	22	25	22	22
500 or more	15	13	12	13	10	11
Grades taught:						
Elementary	52	40	28	29	25	22
Junior and senior high	17	11	5	9	5	3
Other combinations	11	7	6	7	4	3

1/ As a percentage of all public schools.
2/ As a percentage of total U.S. enrollment.

FOOD SERVICE IN PRIVATE SCHOOLS

Availability of Service

About 6,400 of the Nation's 16,000 private schools (parochial and other nonpublic schools) provided a plate lunch or a la carte food service for their students (table 13). Approximately the same number of private schools had milk service only. Some 2.8 million pupils had access to a lunch service in private schools. An additional 2.1 million were enrolled in schools providing only milk, and the remaining 980,000 pupils had access to neither a milk nor a lunch service.

Availability of lunch services varied considerably by region, ranging from 32 percent of all private schools in the Northeast to 65 percent in the Southwest (table 14). When classified by location, the range in proportions of schools with food service was not as great--34 to 45 percent. Elementary private schools are much less likely to have a food service than junior and senior high schools, and larger schools are somewhat more likely to provide a food service than smaller schools. Over half the pupils in the Southeast, Midwest, and Southwest had some type of food service available.

As in the case of public schools, most private schools providing lunch service participated in the NSLP. Of the 6,400 private schools serving food, about 4,700 offered complete plate lunches under the NSLP (table 15). However, less than 50 percent of the schools with food service in the West and in junior and senior high schools participated in the Program. Nationally, 1.9 million pupils, 33 percent of total private school enrollment, had NSLP plate lunches available daily. An additional 900,000 pupils, 15 percent of all pupils, had access to lunches or a la carte service outside the Federal program.

The percentage of private schools participating in the NSLP was highest in the Southwest--50 percent--and lowest in the West--only 11 percent. Consequently, the percentage of pupils in these areas with access to the program reflected these variations in availability. For example, nearly 60 percent of the pupils in the Southwest had access to the program--four times the proportion of pupils in the West with access. When classified by other school characteristics, the highest proportions of pupils with access to the NSLP were in rural areas and in larger schools.

Rate of Pupil Participation

In March 1968, over 50 percent of the pupils attending private schools with a plate lunch program ate the lunch daily. Over 1 million of the estimated 1.3 million lunches served daily were provided by schools participating in the NSLP (table 16). On the basis of total enrollment, 22 percent of all private school pupils ate a plate lunch daily.

Over 50 percent of the pupils enrolled at NSLP private schools in each region, population area, and grade participated daily. In the school size breakdown, however, the proportion of daily participants ranged from 41 percent in large schools to 71 percent in schools with fewer than 250 pupils. Regional differences in the proportion of daily participants were not pronounced, nor were there wide variations when computed by grade or school location.

The ratio of daily participants to enrollment in schools without the Federal program was generally lower than in participating schools. This was particularly true in areas of the Nation under 10,000 in population, where participation was about half that found in program schools.

Table 13.--Number of private schools and pupils having specified kinds of food service available, by region and other school characteristics, March 1968

Item	Food service		Milk only		No food or milk service		Total	
	Schools	Pupils	Schools	Pupils	Schools	Pupils	Schools	Pupils
	Number	Thousands	Number	Thousands	Number	Thousands	Number	Thousands
United States	6,416	2,759	6,342	2,072	3,207	980	15,964	5,811
Regions:								
Northeast	1,628	814	2,163	818	1,336	587	5,127	2,219
Southeast	608	228	413	115	267	46	1,288	388
Midwest	2,795	1,209	2,575	823	826	182	6,196	2,214
Southwest	850	300	243	61	219	44	1,312	405
West	535	207	948	255	559	122	2,041	584
Schools located in places with population of:								
Less than 10,000	2,041	728	1,993	412	1,239	212	5,273	1,352
10,000 - 49,999	1,798	866	1,750	771	559	222	4,107	1,860
50,000 - 299,999	1,337	634	1,191	390	437	184	2,965	1,209
300,000 and over	1,239	531	1,409	499	972	361	3,621	1,390
Size of school (pupil enrollment):								
Under 250	2,041	309	2,843	361	1,555	153	6,439	823
250 - 499	2,528	894	2,138	702	1,118	397	5,783	1,993
500 - 749	923	555	778	462	340	205	2,041	1,222
750 and over	924	1,000	583	548	194	225	1,701	1,774
Grades taught:								
Elementary	4,471	1,603	5,734	1,835	2,843	853	13,049	4,292
Junior and senior high	972	614	194	48	219	76	1,385	738
Other combinations	972	541	413	190	146	51	1,531	782

Table 14.--Percentage of private schools and pupils having specified kinds of food service available, by region and other school characteristics, March 1968

Item	Food service		Milk only		No food or milk		Total	
	Schools	Pupils	Schools	Pupils	Schools	Pupils	Schools	Pupils
	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
United States	40	47	40	36	20	17	100	100
Regions:								
Northeast	32	37	42	37	26	26	100	100
Southeast	47	59	32	30	21	12	100	100
Midwest	45	55	42	37	13	8	100	100
Southwest	65	74	19	15	17	11	100	100
West	26	35	46	44	27	21	100	100
Schools located in places with population of:								
Less than 10,000	39	54	38	30	23	16	100	100
10,000 - 49,999	44	47	43	41	14	12	100	100
50,000 - 299,999	45	52	40	32	15	15	100	100
300,000 and over	34	38	39	36	27	26	100	100
Size of school (pupil enrollment):								
Under 250	32	38	44	44	24	19	100	100
250 - 499	44	45	37	35	19	20	100	100
500 - 749	45	45	38	38	17	17	100	100
750 and over	54	56	34	31	11	13	100	100
Grades taught:								
Elementary	34	37	44	43	22	20	100	100
Junior and senior high	70	83	14	7	16	10	100	100
Other combinations	63	69	27	24	10	7	100	100

Table 15.--Private schools and pupils, by type of lunch service available, region, and other school characteristics, March 1968

Item	Schools with National School Lunch Program				Schools with other lunch programs			
	Total	Percentage of all private schools	Pupils	Percentage of all pupils enrolled	Total	Percentage of all private schools	Pupils	Percentage of all pupils enrolled
	Number	Percent	Thousands	Percent	Number	Percent	Thousands	Percent
United States	4,715	30	1,903	33	1,701	11	856	15
Regions:								
Northeast	972	19	465	21	656	13	349	16
Southeast	389	30	142	37	219	17	86	22
Midwest	2,479	40	969	44	316	5	240	11
Southwest	656	50	239	59	194	15	61	15
West	219	11	88	15	316	15	119	20
Schools located in places with population of:								
Less than 10,000	1,798	34	617	46	243	5	111	8
10,000 - 49,999	1,239	30	560	30	559	14	307	16
50,000 - 299,999	948	32	412	34	389	13	222	18
300,000 and over	729	20	314	23	510	14	217	16
Size of school (pupil enrollment):								
Under 250	1,628	25	256	31	413	6	53	6
250 - 499	1,750	30	608	31	778	13	286	14
500 - 749	802	39	483	40	121	6	71	6
750 and over	535	31	555	31	389	23	446	25
Grades taught:								
Elementary	3,815	29	1,331	31	656	5	273	6
Junior and senior high	316	23	193	26	656	47	421	57
Other combinations	583	38	379	48	389	25	162	21

Table 16.--Average daily participation (number of plate lunches served daily) in private schools, by type of lunch program, region, and school characteristics, March 1968

Item	Pupils consuming plate lunches in--				All pupils consuming plate lunches		
	NSLP schools		Other plate lunch service schools			Percentage of enrollment in--	
	Number	Percentage of enrollment	Number	Percentage of enrollment	Number	Schools receiving plate lunches	All private schools
	Thousand	Percent	Thousand	Percent	Thousand	Percent	Percent
United States	1,072	56	207	42	1,279	53	22
Regions:							
Northeast	255	55	93	40	348	50	16
Southeast	100	70	37	49	137	63	35
Midwest	510	53	53	50	563	52	25
Southwest	152	64	8	40	160	62	40
West	55	62	17	31	72	51	12
Schools located in places with population of:							
Less than 10,000	379	61	6	23	385	60	28
10,000 - 49,999	319	57	75	34	394	50	21
50,000 - 299,999	212	51	86	53	298	52	25
300,000 and over	162	52	40	50	202	51	15
Size of school (pupil enrollment):							
Under 250	182	71	19	54	201	69	24
250 - 499	380	62	78	43	458	58	23
500 - 749	281	58	--	--	281	53	23
750 and over	229	41	110	48	339	43	19
Grades taught:							
Elementary	755	57	63	38	818	55	19
Junior and senior high	114	59	87	47	201	53	27
Other combinations	202	53	57	41	259	50	33

Private Schools Without Food Service

As part of the survey, private school authorities were asked if they had plans for adding a food service within the 18 months following March 1968. If such plans were reported, it was likely that most arrangements were in final form and installation was reasonably certain. Approximately 360 schools with a total enrollment of 100,000 pupils had such plans (table 17). These schools and pupils represented less than 4 and 3 percent, respectively, of the private schools and pupils without a food service.

About 9,200 schools with nearly 3 million pupils had no plans for adding a food service. The characteristics of these schools were very similar to public schools without food service. Most of these schools consisted of elementary grades. Thus, 2.6 million private school pupils without food service were in elementary schools. The Northeast and Midwest regions had the largest number of schools without plans for a lunch service--over 6,600 of the total. The schools without food service in these regions had a combined enrollment of over 2.3 million pupils. On a national basis, more than 50 percent of all private school pupils lacked food service.

FACTORS AFFECTING PUPIL PARTICIPATION

While daily participation averaged 51 and 56 percent, respectively, in public and private schools with the NSLP, actual day-to-day participation varied considerably from these national averages.

Factors that can account for some variation at the local school level include: price charged for plate lunches, types of food served, advance publication of menus, permission to leave school premises, proximity of commercial eating establishments, time allowed for lunch, availability of low-price milk, neighborhood income levels, and attitudes of pupils and administrators toward lunch services. Unfortunately, data on income levels, opinions, etc., is difficult to obtain on a national scale and make analyses of factors affecting participation incomplete. This was one reason why an attempt to measure the effect of selected survey data on daily participation yielded few statistical relationships. Another was that factors affecting participation have different effects in different schools.

The price charged for a plate lunch naturally affects the number of pupils purchasing it. For example, 63 percent of the elementary school pupils in public NSLP schools participate at 25 cents, while only 38 percent participate at 40 cents (table 18). This general pattern was also evident in junior and senior high schools. However, in public schools with a combination of grades and age groups, daily participation was relatively stable in the 25-to-40 cent price range. These national averages indicate a strong relationship between prices and number of lunches served. Caution should be used, however, in projecting changes in individual schools based on these averages. Many local elements may influence such responses to price change.

During March 1968, the most commonly charged price for plate or bag lunches was 30 cents, closely followed by 35 cents in NSLP schools. This is 5 cents higher in both cases than was found in the 1962 survey. These increases probably reflect higher wholesale food prices and labor costs associated with purchasing, preparing, and serving lunches. Approximately 25 percent of the NSLP public schools increased prices for a plate lunch from their 1967 levels. The increase averaged about 5 cents per lunch (appendix table 24). These new prices were generally 2 to 3 cents higher than those charged by schools which did not increase 1967 prices for the 1968 school year. Higher prices were evident in all regions, but most schools reporting an increase were in rural areas and were elementary schools.

Table 17.--Plans for lunch service in private schools not serving lunches, by regions and school characteristics, March 1968

Item	Schools without lunch services		Schools with plans for lunch services		Schools with no plans for lunch services	
	Schools	Pupil	Schools	Pupils	Schools	Pupils
	Number	Thousands	Number	Thousands	Number	Thousands
United States	9,549	3,052	362	100	9,187	2,952
Regions:						
Northeast	3,499	1,405	121	52	3,378	1,353
Southeast	680	161	24	5	656	156
Midwest	3,401	1,005	121	30	3,280	975
Southwest	462	105	48	8	414	97
West	1,507	377	48	4	1,459	373
School located in places with population of:						
Less than 10,000	3,232	624	145	31	3,087	593
10,000 - 49,999	2,309	993	23	16	2,236	977
50,000 - 299,999	1,628	574	49	10	1,579	564
300,000 and over	2,381	860	98	43	2,283	817
Size of school (pupil enrollment):						
Under 250	4,398	514	242	36	4,156	478
250 - 499	3,256	1,099	49	13	3,207	1,086
500 - 749	1,118	667	49	25	1,069	642
750 and over	777	773	24	26	753	747
Grades taught:						
Elementary	8,577	2,688	291	77	8,286	2,611
Junior and senior high	413	124	48	11	365	113
Other grade combinations	559	241	24	12	535	229

Table 18.--Average daily participation by pupils purchasing a plate lunch in public schools with the National School Lunch Program, by price of a plate lunch and grades taught, March 1968

Price of school lunch 1/ (cents)	Average daily participation in--			
	Elementary schools	Secondary schools	Other schools	All schools
	Percent	Percent	Percent	Percent
Under 22.5	75	69	62	68
22.5 - 27.4	63	60	49	56
27.5 - 32.4	49	44	51	49
32.5 - 37.4	46	44	46	45
37.5 - 42.4	38	37	50	39
42.5 and over	39	38	42	39

1/ Most lunches were served at the midpoint of the intervals shown. Prices under 23 cents and over 42 were reported in relatively few instances and are, therefore, subject to sampling variance.

Average plate lunch prices in public schools without the NSLP were about 4 cents higher than participating schools. This differential probably accounts for some of the lower participation levels, compared with NSLP schools. Since these schools do not receive cash donations or a commodity donation from USDA, the price difference could be partly attributed to not receiving this assistance. NSLP schools at the time of the survey received about 4.8 cents for each Type A lunch served.

Another factor that may determine the number of plate lunches served on any given day is what foods are served. For example, if children know the entree is a hamburger or hot dog, participation may increase in some regions. This is associated with advance publication of menus. Earlier studies indicated advance menu publication generally lowers daily participation. However, the popularity of some entrees, such as hamburgers, would tend to raise participation, Thus, the net effect of menu publication on daily participation cannot be measured. But if pupils start to participate on a few popular menus, they may be more willing to try new foods.

Approximately 52 percent of both public schools in the NSLP and other public schools with a plate lunch service permitted pupils to leave school premises during the lunch period (appendix table 25). Proportionately, fewer public NSLP schools located in the Northeast and Southeast granted permission to leave the premises compared with other regions of the country. When classified by other school characteristics, no significant variation in schools granting permission to leave was apparent. Average daily participation was 7 percent lower in both public NSLP and non-NSLP schools permitting pupils to leave, compared with schools that require attendance in school during the lunch period. The negative effects were particularly evident in the Southwest, among smaller and elementary schools, and in schools located in places with population of 10,000 to 50,000 and in urban areas. Differences in other school characteristics may be due, in part, to sampling variability. However, the virtually uniform lower rates of participation indicate that permission to leave school premises lowers participation in noontime lunch programs.

THE NEEDY PUPIL

At the time of the survey, NSLP schools were required to provide lunches free or at reduced price to pupils determined by local school authorities to be unable to pay the regular price. 7/ During March 1968, survey results indicate 2.1 million needy pupils in public NSLP schools and 132,000 needy pupils in private NSLP schools (tables 19 and 20). This represented 6.1 percent of total enrollment in NSLP schools.

The highest proportion of needy children in public schools was in the Southeast region, where over 12 percent of the pupils received free or reduced-price lunches daily. This region accounts for about 50 percent of all free or reduced-price lunches served in the 50 States. In contrast, over two-thirds of the free or reduced-price lunches in private schools were served in the Northeast and Midwest. Both public and private schools located in rural areas of the country also had high proportions of needy children. The smallest ratios of needy pupils were reported among junior and senior high schools.

Lunches served free or at reduced prices constituted about 12 percent of all plate lunches served under the NSLP in public and private schools. However, this ratio varied when computed by school characteristics. Over 15 percent of public school lunches served in the Southeast, Southwest, and urban areas of the Nation were served

---

7/ In this report, children receiving a free or reduced-price lunch are termed "needy." Approximately 80 percent of the needy pupils received lunches without charge in the NSLP during the survey period.

Table 19.--Needy pupils in public schools with food service, by region and school characteristics, March 1968

Item	Needy pupils in NSLP schools			Needy pupils in other plate lunch service schools		
	Number	Percentage of enrollment	Percentage of pupils consuming plate lunches	Number	Percentage of enrollment	Percentage of pupils consuming plate lunches
	Thousand	Percent	Percent	Thousand	Percent	Percent
United States	2,105	6.0	11.8	89	4.2	12.1
Regions:						
Northeast	289	3.6	8.9	8	2.2	8.7
Southeast	1,057	12.6	18.2	14	13.9	26.9
Midwest	237	2.5	5.4	13	2.7	9.5
Southwest	439	8.4	15.4	47	12.4	23.2
West	82	2.2	5.3	7	.9	2.8
Schools located in--						
Places under 10,000	1,283	7.7	13.2	17	6.4	18.5
Places of 10,000 to 50,000	268	3.4	6.9	12	1.7	6.8
Places of 50,000 to 300,000	259	5.1	10.2	12	2.3	5.8
Places of 300,000 and over	295	5.7	17.1	48	7.9	18.5
Size of schools (pupil enrollment):						
Under 250	188	10.7	14.0	11	22.9	39.3
250 - 499	569	7.7	14.0	12	4.5	17.4
500 - 749	512	6.2	10.8	17	4.6	10.6
750 or more	836	4.8	10.8	49	3.5	10.2
Grades taught:						
Elementary	1,220	6.7	12.1	60	6.8	18.3
Junior and senior high	267	3.2	8.3	14	1.4	4.4
Other combinations	618	7.6	13.4	15	6.8	16.1

Table 20.--Needy pupils in private schools receiving free or reduced price lunches by type of lunch program, region, and school characteristics, March 1968

Item	Needy pupils in NSLP schools			Needy pupils in other plate lunch service schools		
	Total	Percentage of enrollment	Percentage of pupils consuming plate lunches	Total	Percentage of enrollment	Percentage of pupils consuming plate lunches
	Number	Percent	Percent	Number	Percent	Percent
United States	131,600	7	12	7,700	2	4
Regions:						
Northeast	52,500	11	21	3,600	2	4
Southeast	8,100	6	8	1,000	1	3
Midwest	57,700	6	11	200	--	--
Southwest	8,500	4	6	1,900	10	24
West	4,900	6	9	1,000	2	6
Schools located in:						
Places under 10,000	65,300	11	17	100	--	2
Places of 10,000 to 50,000	17,700	3	6	4,500	2	6
Places of 50,000 to 300,000	32,700	8	15	1,000	1	1
Places of 300,000 and over	15,800	5	10	2,000	2	5
Size of school (pupil enrollment):						
Under 250	21,900	9	12	1,600	5	8
250 - 499	50,400	8	13	500	--	1
500 - 749	36,200	7	13	---	--	--
750 and over	23,100	4	10	5,600	2	5
Grades taught:						
Elementary	97,900	7	13	5,200	3	8
Junior and senior high	4,300	2	4	1,400	1	2
Other combinations	29,500	8	15	1,100	1	2

free or at reduced price. In private schools, over 15 percent of the lunches served in the Northeast and at schools located in places under 10,000 population were served free or at reduced price.

Schools outside the NSLP also provided lunches free or at reduced price to needy pupils. Approximately 2 percent of the student enrollment in private schools--about 8,000 pupils--were obtaining such lunches daily. Nearly 90,000 free or reduced-price lunches were served daily in public schools. About two-thirds of these lunches were served in elementary schools, and over 50 percent were accounted for by schools in the Southwest. Needy pupils in nonprogram public schools accounted for 4 percent of total enrollment and 12 percent of all lunches served.

Public Law 91-248, passed May 14, 1970, which changes the criteria for determining need, will have an impact on the number of children receiving free or reduced-price lunches. The income poverty guidelines for determining eligibility for these lunches (summarized in table 21) were mandatory January 1, 1971, for schools in the NSLP and schools receiving commodities.

Table 21.--Income poverty guidelines for determining eligibility for free and reduced price lunches, 1970-71 school year

Family size	48 States, D.C., and outlying areas 1/	Hawaii	Alaska
One	$1,920	$2,210	$2,400
Two	2,520	2,900	3,150
Three	3,120	3,590	3,900
Four	3,720	4,280	4,650
Five	4,270	4,910	5,340
Six	4,820	5,540	6,025
Seven	5,320	6,115	6,650
Eight	5,820	6,690	7,275
Each additional family member	450	520	560

1/ "Outlying areas" include the Commonwealth of Puerto Rico, Guam, Virgin Islands, American Samoa, and the Trust Territory of the Pacific Islands.

TRENDS IN SCHOOL FOOD SERVICE

Growth in the number of plate lunches served results from increases in the availability of food services, rate of average daily participation, and expanding school enrollments. All three factors have contributed to the expansion of public school lunch programs since 1957, the first year for which survey data of this type was gathered. Information for private schools was first obtained in 1962.

Trends in Availability in Public Schools

The number of public elementary and secondary schools in the Nation has declined for over a decade. Much of this decrease probably results from consolidation or annexation of one-school districts and the closing of one-teacher schools. This trend has been most apparent among elementary schools, schools with under 250 pupils enrolled, and schools in the Midwest. For economic reasons, such public schools may not have provided a lunch service. New, larger school buildings have been built during this period probably with facitities for food service, but the closures have outstripped the new construction.

Since food service tends to exist in larger schools, the trend toward fewer schools has had the effect of increasing the ratio of schools with food service to all public schools. Schools without food service decreased from about 45,000 in 1957 to 30,000 in 1962 and to 19,000 in 1968 (figure 2). At the same time, the number of schools with non-NSLP lunch programs decreased from about 8,000 in 1957 to less than 3,800 in 1968. However, the number of NSLP schools has been increasing since 1957. Thus, virtually all growth in school lunch programs has been within the framework of the NSLP.

Although the trend toward fewer but larger schools with food service will continue, the rate of decline will probably be less than in the recent past. For instance, survey data indicate the number of public elementary and secondary schools declined from 1957 to 1962 at an average annual rate of 1.8 percent. During 1962-68, the annual rate of decline was about 1.3 percent. This trend indicated future expansion in the availability of lunch programs will depend more on the efforts of local, State, and Federal authorities than on a decrease in small schools and an increase in new facilities. Such efforts can be quite successful. For example, in several Southeastern States, all public schools now provide noontime food services. While the problems faced in the Southeast in achieving this may not be directly parallel to those in other States and regions, the results demonstrate that providing food service for all U.S. public school pupils is not an impossible goal.

During 1957-68, public school enrollment increased by approximately 12.3 million and the number of pupils in schools without any type of food service remained constant at about 6.3 million (figure 3). The proportion of pupils in schools with food service rose from 80 to 86 percent in 11 years. However, enrollment in non-NSLP schools with lunch services declined. Growth in pupil enrollments since 1957 was primarily in public NSLP schools. The growth in total enrollment--12.3 million--was exceeded by the increase of pupils in the national program--12.7 million. If past trends continue, most, if not all, enrollment growth experienced by public elementary and secondary in the near future will occur within the framework of the NSLP.

Daily Participation Trends in Public Schools

The ratio of pupils consuming plate lunches to enrollment in public schools with food service has increased slowly but steadily since 1957, when 42 percent were participating daily (table 22). By 1968, the ratio had increased to 48 percent. Growth, however, varied by region and other school characteristics. For instance, Southeastern schools experienced the largest regional increase--15 percent since 1957. While other regions have had increases, there has been little expansion since 1962. Schools with fewer than 250 pupils enrolled also had a large increase in participation--14 percent.

Trends in Private School Food Service

In the 6 years between the 1962 and 1968 surveys, the number of pupils enrolled in private elementary and secondary schools slightly declined, while the number of schools remained virtually the same. However, differences in survey results for the two periods may be due to sampling variability. It is apparent, nevertheless, that the food service in private schools has not followed the growth patterns found in public schools. On a national level, the proportion of private schools participating in the NSLP declined slightly from 33 to 30 percent (table 23). The decline was most evident in the Northeast region and among schools teaching a combination of grades.

The proportion of private school pupils having a plate lunch available under the NSLP also declined 5 percent since the 1962 study to 33 percent. The greatest percentage declines were in the Northeast and West and in other grade combination schools. However, average daily participation as a ratio to enrollment in program schools has virtually remained at the 55 percent level found in 1962. In absolute terms, though, the number of plate lunches consumed daily in private schools with the NSLP has declined.

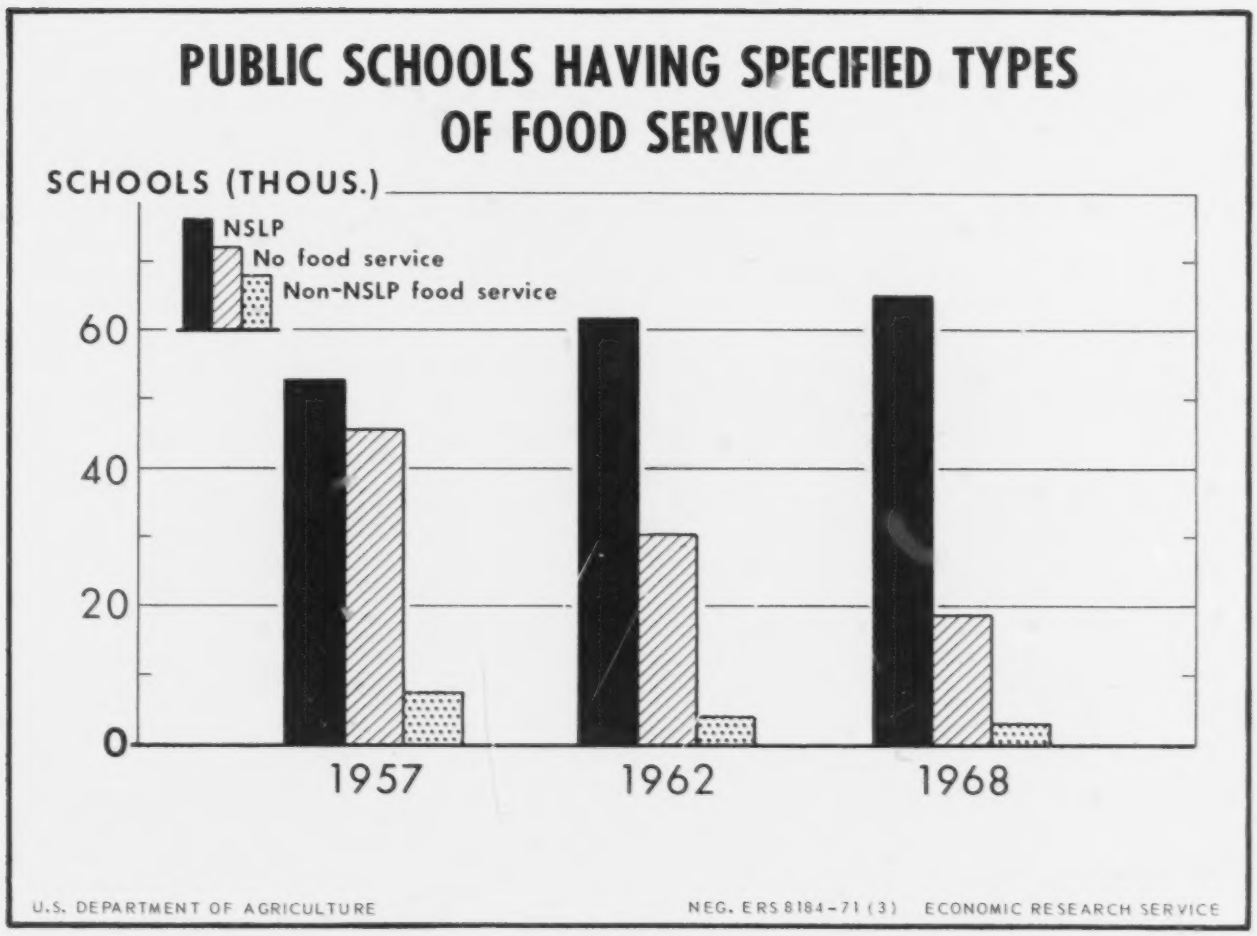

Figure 2

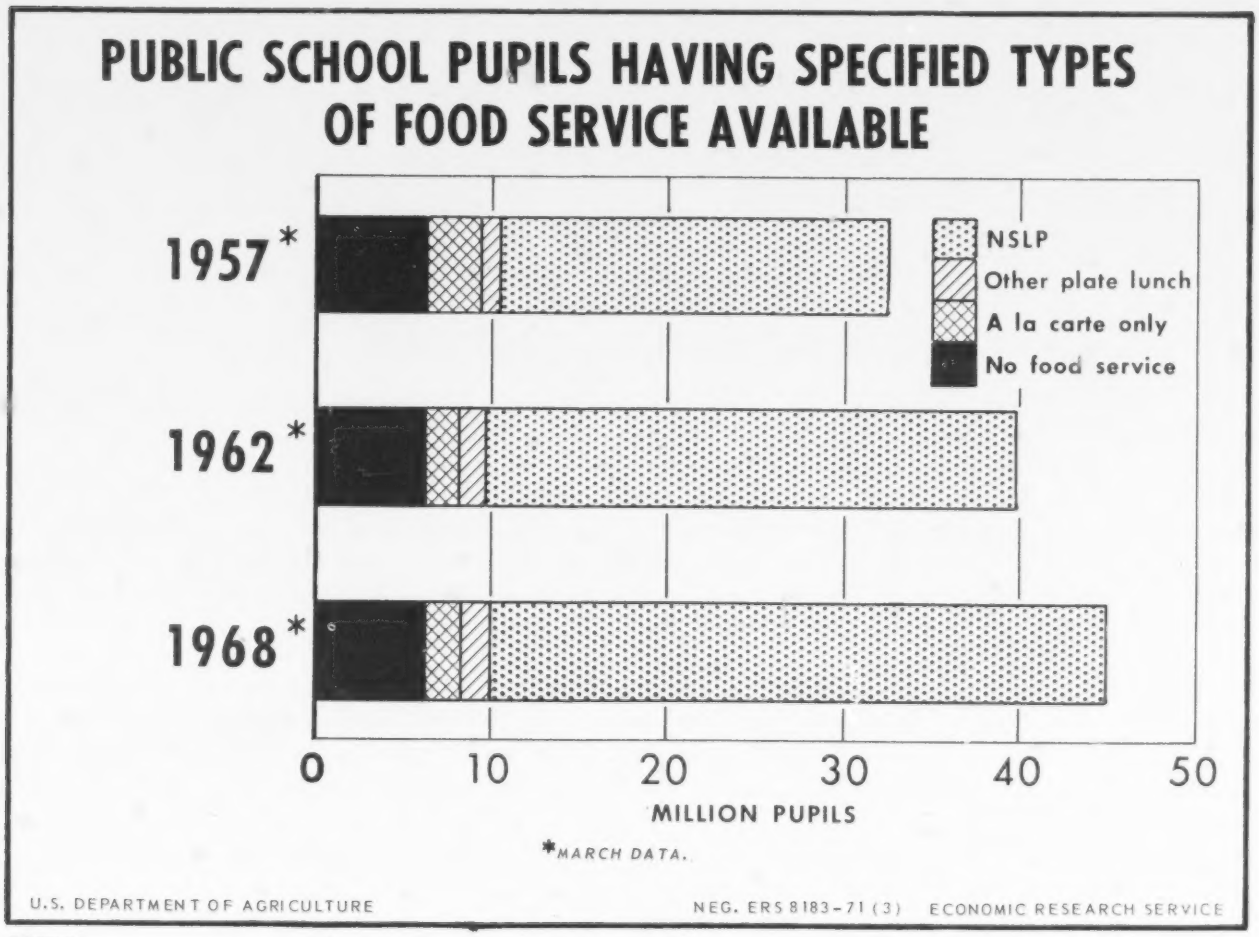

Figure 3

Table 22.--Average daily participation in public school plate lunch food services by region and other school characteristics, March 1957, 1962 and 1968

Item	Pupils in schools with food service					
	Average daily participation as percentage of enrollment in schools with plate lunch food service			Average daily participation as percentage of enrollment in all public schools		
	1957	1962	1968	1957	1962	1968
	Percent	Percent	Percent	Percent	Percent	Percent
United States	42	44	48	33	37	42
National School Lunch Program	38	42	46	30	36	40
Other food service	4	2	2	3	1	2
Region:						
Northeast	33	38	40	24	30	31
Southeast	51	56	66	47	53	65
Midwest	43	45	44	30	34	35
Southwest	44	51	53	39	47	50
West	33	33	35	28	29	30
Size of school (pupil enrollment):						
Under 250	62	67	76	39	43	56
250 - 499	51	56	53	39	44	41
500 or more	34	38	45	30	34	40
Grades taught:						
Elementary	47	48	53	34	36	41
Junior and senior high	27	33	33	25	31	32
Other combinations	48	64	56	44	62	54

Table 23.--Private school participation in the National School Lunch Program, by region and school characteristics, March 1962 and March 1968

Item	Private schools serving plate lunches under the National School Lunch Program							
	Number of schools participating as a percentage of all schools		Pupil enrollment as a percentage of all private school pupils		Average daily participation as a percentage of enrollment in participating schools		Average daily participation as a percentage of enrollment in all private schools	
	1962	1968	1962	1968	1962	1968	1962	1968
	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
United States	33	30	38	33	55	56	21	18
Regions:								
Northeast	27	19	30	21	51	55	15	11
Southeast	33	30	42	37	66	70	28	26
Midwest	39	40	43	44	50	53	22	23
Southwest	45	50	62	59	62	64	39	38
West	16	11	23	15	45	62	10	9
Size of school (pupil enrollment):								
Under 250	26	25	30	31	79	71	24	22
250 - 499	36	30	37	31	59	62	30	19
500 and over	39	36	40	35	47	49	19	17
Grades taught:								
Elementary	31	29	34	31	56	57	19	18
Junior and senior high	27	23	22	26	55	59	13	15
Other combinations	48	38	62	48	50	53	31	26

This is reflected in the data showing average daily participation in NSLP schools as a percentage of total private school enrollment. Eighteen percent of all private school pupils ate a plate lunch daily in 1968, or 3 percent less than in 1962.

Future School Enrollments and Pupil Participation

Most of the NSLP growth in plate lunches served in 1957-68 resulted from increases in pupil enrollment. However, total population will probably expand at a modest pace over the next decade. The increased numbers of young adults will start a new wave in household formations and, as a result, total births will increase. This, however, will not affect the population of school-age children between now and the latter part of the seventies. For most of the next decade, about as many children will become 18 each year (and thus leave the secondary school system) as there will be new arrivals in the under-18 age bracket. These new arrivals will be under 6, and will not affect total kindergarten and grades 1-12 enrollments. Hence, the number of elementary age children will probably decline until the latter part of the 1970's before increasing again. As the current elementary age children move into the higher age brackets, the number enrolled in junior and senior high schools will increase. The balance of declines in elementary schools and increases in the upper school grades means that total enrollment in schools will not change until the late 1970's at the earliest. By 1980, however, enrollments should start to increase.

These trends mean the number of plate lunches served under the NSLP will not increase merely by enrollment growth. Any gain in the program will depend on the participation of new schools with lunch facilities and pupils not now in the program. Since the trend from 1957 has been for an increasing proportion of public schools to participate in the program, some growth is anticipated from this source. This trend has been boosted by the passage of the Child Nutrition Act of 1966 and Public Law 91-248. However, major increases in plate lunches served will depend on growth in daily participation. Steps in this direction are the new national family income guidelines for determining eligibility for free and reduced-price lunches.

CONCLUSIONS

The results of this survey indicate that school lunch service has become an important adjunct to elementary and secondary school operations. With the consolidation and construction of school buildings, a larger number and greater proportion of children had food service available by March 1968 than ever before.

As a market for food away from home, the school lunch program uses about $1.4 billion worth of food, 80 percent of which is purchased at the local level. This market is likely to grow with increases in school and pupil participation. The dollar value of food used represents the third largest institutional segment of the market for food away from home.

Despite the growth in availability of school lunch programs, about 30.8 million public and private school pupils do not eat plate lunches daily. About 70 percent of these pupils are in schools with a lunch service, while the rest do not have such a service available. The new approach to determine eligibility for free or reduced-price lunches and the special nonfood assistance for implementing a food service will increase participation and availability in lunch programs. Still other means may need to be explored to reach many nonparticipants in lunch programs. Findings indicate that a particular problem exists: persuading pupils to eat lunches where services are now available.

APPENDIX I--ADDITIONAL TABLES

Table 24.--Customary price charged for a plate lunch and changes since 1967 in public schools, by type of lunch program, region, and school characteristics, March 1968

Item	Public schools in NSLP which--				Public schools without the NSLP which--			
	Changed prices from 1967			Did not change prices	Changed prices from 1967			Did not change prices
	Schools	Average 1967 price	Average 1968 price	Average 1968 price	Schools	Average 1967 price	Average 1968 price	Average 1968 price
	Percent	Cents	Cents	Cents	Percent	Cents	Cents	Cents
United States	24	28.4	33.1	30.7	27	29.3	34.2	34.9
Regions:								
Northeast	25	30.9	35.8	30.9	40	32.0	37.0	34.3
Southeast	23	28.8	33.2	30.4	---	---	---	37.9
Midwest	20	28.7	33.2	31.7	27	33.3	38.3	32.6
Southwest	24	24.4	29.2	29.5	40	25.7	30.6	33.7
West	18	29.9	34.3	30.1	6	30.0	35.0	35.8
Schools located in:								
Places under 10,000	20	26.4	30.9	28.9	18	27.4	32.4	25.5
Places of 10,000 to 50,000	24	30.5	35.5	32.2	24	32.4	37.4	36.9
Places of 50,000 to 300,000	26	28.6	33.0	33.4	---	---	---	37.2
Places of 300,000 and over	27	31.9	36.7	34.3	50	27.5	32.4	31.5
Size of school (pupil enrollment):								
Under 250	17	25.0	29.5	27.8	38	28.7	33.7	26.3
250-499	24	26.6	31.3	29.1	14	25.2	30.2	33.2
500-749	23	27.7	32.3	30.7	12	25.0	30.0	34.1
750 or more	24	30.1	34.7	32.0	38	30.4	35.3	36.4
Grades taught:								
Elementary	22	27.6	32.0	30.2	29	27.5	32.5	33.0
Junior and senior high	30	32.6	37.7	35.3	18	32.5	37.3	38.7
Other combinations	18	25.5	30.0	28.8	33	30.0	35.0	29.6

Table 25.--Proportion of public schools granting permission to leave school premises for lunch and effect on average daily participation, by type of lunch program, region and school characteristics, March 1968

Item	Public schools in National School Lunch Program: Percentage of schools granting permission to leave	Public schools in National School Lunch Program: Difference in daily participation compared with schools not granting permission to leave	Other public school plate lunch programs: Percentage of schools granting permission to leave	Other public school plate lunch programs: Difference in daily participation compared with schools not granting permission to leave
	Percent	Percent	Percent	Percent
United States	51.6	-7.1	52.2	-7.0
Regions:				
Northeast	43.7	-1.9	53.1	-2.0
Southeast	25.9	-3.1	55.0	-3.4
Midwest	63.5	-4.3	40.6	-3.8
Southwest	65.6	-15.1	44.4	-9.1
West	74.2	+1.2	65.9	+1.7
Schools located in:				
Places under 10,000	51.4	-6.2	48.4	-6.0
Places of 10,000 to 50,000	52.6	-9.1	60.4	-11.9
Places of 50,000 to 300,000	48.8	-2.9	53.1	-1.1
Places of 300,000 and over	54.4	-15.7	44.4	-11.5
Size of school (pupil enrollment):				
Under 250	50.3	-9.6	53.9	-9.5
250-499	54.5	-11.8	61.3	-11.8
500-749	54.1	-8.4	60.7	-8.6
750 or more	46.2	-3.8	44.3	-7.0
Grades taught:				
Elementary	51.6	-12.2	54.3	-11.0
Junior or senior high	42.0	-8.3	47.6	-7.9
Other combinations	59.0	-2.0	66.3	-3.4

Table 26.--Average unit price paid for bread in public schools in the National School Lunch Program, by region and school characteristics, March 1968

Item	NSLP Schools who--					
	Bought bread locally			Contracted out for bread		
	1-1b. loaf	2-1b. loaf	1-1/2-1b. loaf	1-1b. loaf	2-1b. loaf	1-1/2-1b. loaf
	Cents	Cents	Cents	Cents	Cents	Cents
United States	22.5	29.7	25.8	19.7	27.1	24.1
Regions:						
Northeast	23.3	29.2	27.4	17.6	25.5	23.5
Southeast	21.1	28.4	25.8	19.6	24.3	23.6
Midwest	22.4	32.0	25.4	19.7	33.3	23.7
Southwest	21.8	28.6	24.9	21.3	25.0	25.3
West	27.2	28.9	27.5	25.3	27.0	25.6
Schools located in--						
Places under 10,000	23.1	28.9	26.5	19.9	25.4	23.6
Places of 10,000 to 50,000	21.8	29.6	24.9	19.6	27.[illegible]	23.3
Places of 50,000 to 300,000	21.3	31.6	25.3	18.0	29.5	24.0
Places of 300,000 and over	19.1	33.9	25.1	20.2	29.9	26.8
Size of schools (pupil enrollment):						
Under 250	23.1	29.5	26.3	20.1	23.8	23.6
250 - 499	22.5	29.1	26.7	20.3	25.6	23.4
500 - 749	22.7	29.1	24.9	18.8	26.8	24.3
750 or more	21.4	31.0	25.5	20.1	29.1	24.5
Grades taught:						
Elementary	22.6	29.7	25.7	19.9	26.2	24.3
Junior and senior high	21.5	29.7	25.6	19.5	30.7	23.1
Other combinations	22.7	29.5	26.4	19.5	26.7	24.1

APPENDIX II--METHODOLOGY

For this survey of school and pupil participation in public and private school food programs, a systematic sample was selected of elementary and secondary schools throughout the 50 States. A complete card listing of public and private schools in operation as of November 1967 was obtained by the Bureau of the Census in its 1967 Census of Governments. These cards are arranged by States and school districts. The sample schools were selected so as to produce a self-weighting sample of 8,000 public schools and 1,600 private schools; half of that number in each case received a form focusing on noontime food services and half received one focusing on breakfast and milk service. Some questions were common to both forms. The design called for selection of one in 23 of the public schools in each panel and one in 20 private schools to produce reliable U.S. totals.

The survey was conducted by mail, employing intensive followup steps to stimulate responses until the cutoff date for data collection. By that time, a response rate of approximately 90 percent had been attained.

Returned questionnaires were examined for conformance with instructions, completeness, and other quality standards. When necessary, correspondence was undertaken to correct deficiencies and improve the accuracy of the data. Some replies were unusable for tabulation, and some schools were closed. The net result was a sample of 3,016 public schools and 657 private schools providing usable information for the survey panel on school food services.

The method of expansion for public school universe estimates involved applying a factor (29.5706) adjusted for nonresponse to reported information and adding the results to obtain regional and national totals. The factor is the ratio of all public elementary and secondary schools in the United States to schools in the sample. A similarly computed factor, 24.2997, was used for private elementary and secondary schools.